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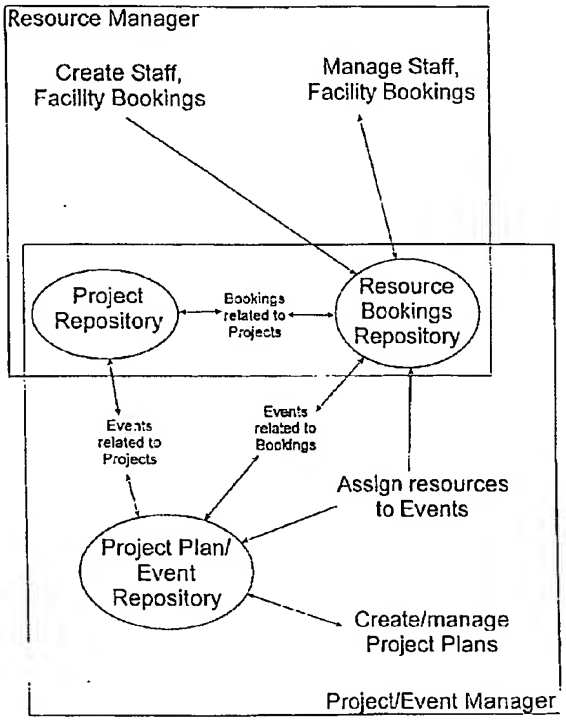
(54) SYSTEME POUR LIER L'ENGAGEMENT D'UNE RESSOURCE AVEC LES EVENEMENTS D'UN PROJET, ET METHODE CONNEXE

(54) A SYSTEM FOR LINKING A BOOKING OF A RESOURCE WITH EVENTS OF A PROJECT AND A METHOD THEREFOR

(57)

The invention relates to a system and a method of enhancing a project management system for execution on a computer or on the Internet, by integrating a resource management system with the project management system by providing a tight link between them, so that they share various information data, namely, bookings of facilities, staff assignments and expenses stored previously in a database. The present system particularly relates to a system and a method of linking a booking of a resource within the resource management system to events of a project contained in the project management system at the database level. In addition, the resource management system may be shared effectively by various projects included in the project management system.



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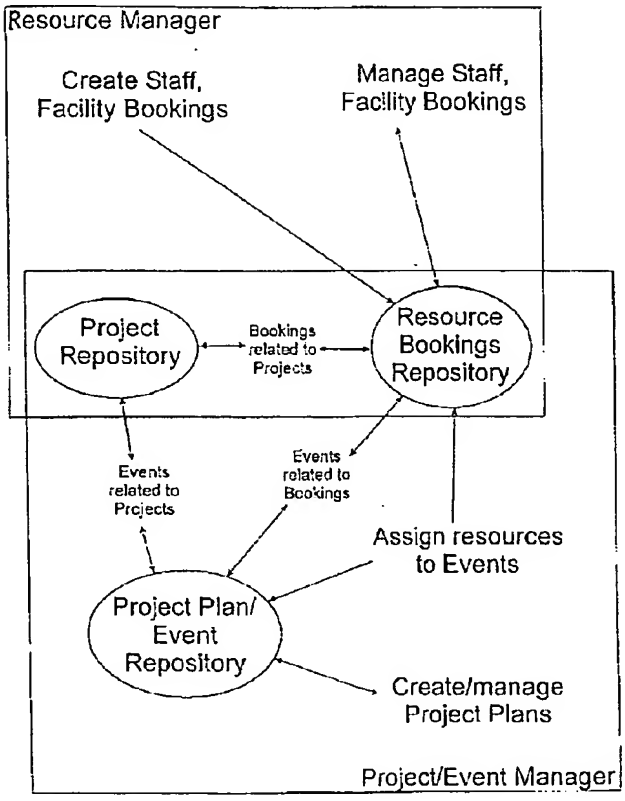

(57) Abrégé/Abstract:
The invention relates to a system and a method of enhancing a project management system for execution on a computer or on the Internet, by integrating a resource management system with the project management system by providing a tight link

(57) Abrégé(suite)/Abstract(continued):
between them, so that they share various information data, namely, bookings of facilities, staff assignments and expenses stored previously in a database. The present system particularly relates to a system and a method of linking a booking of a resource within the resource management system to events of a project contained in the project management system at the database level. In addition, the resource management system may be shared effectively by various projects included in the project management system.

Abstract

The invention relates to a system and a method of enhancing a project management system for execution on a computer or on the Internet, by integrating a resource management system with the project management system by providing a tight link between them, so that they share various information data, namely, bookings of facilities, staff assignments and expenses stored previously in a database. The present system particularly relates to a system and a method of *linking* a booking of a resource within the resource management system to events of a project contained in the project management system at the database level. In addition, the resource management system may be shared effectively by various projects included in the project management system.

A System for Linking a Booking of a Resource with Events of a Project and a Method therefor

Field of Invention

The present invention relates to a method of enhancing a project management system by integrating the same with a resource management system by linking a booking of a resource within the resource management system to events of a project contained in the project management system at the database level.

Background of Invention

Project Management is an approach used to manage work with the constraints of time, cost and performance. The complex relationships between various competing resources, outcomes and client expectations that affect the performance and delivery of specified tasks require the application of methodologies particularly suited to the management of unique undertakings. The tasks might involve managing a plurality of technically complex projects, managing funding, and combining and managing the talents and time of hundreds of people. Project management has evolved to ensure that all such tasks are successfully completed in a most efficient and optimum manner.

Many systems available today tend to focus on either project or resource management, but generally not both. As such, they tend to lack suitable functionality and flexibility. Although most project management systems work with resources, they do not usually provide a method of managing them independently - only through the project management system.

One such software-based project management tool is Microsoft Project™, which is a popular tool for managing a project. It provides a powerful environment for managing events within a project, with the ability to roll up events, indicate predecessors of events, calculate critical paths, reschedule events in order to optimize the project schedule, etc. It also allows people to be assigned to events, and in this way, provides limited resource management. The major functions and features of the software are namely to initiate, plan, execute, control, and report progress of projects where the emphasis is placed upon using the software to effectively create and manage project schedules using accepted project management principles. The database, where the resource information is stored, cannot be shared or manipulated by a plurality of projects.

The present invention addresses all of the above problems and presents a system and a method for enhancing an existing project management system (known as iC21), which has been developed within Nortel Networks and is a powerful tool for managing multiple projects that is used to manage events in a similar fashion to the prior art. The invention seeks to provide an enhanced project management system capable of linking a booking of a resource within a resource management system to events of a project contained in a project management system at the database level, thereby rendering the system significantly versatile and advantageous over prior art techniques.

Summary of Invention

The present invention, relates to a system and a method of enhancing the iC21 system by integrating the project and the resource management systems so that all the projects and resource management systems share the same booking and assignment data. The assignments and bookings are defined so that they can be:

a. not attached to a project,
b. attached to a project, or
c. attached to an event within a project.

Accordingly, one aspect of the present invention provides a computer or internet-based system for linking a project management system with a resource management system contained therein, wherein the system comprises a project management system including:

a program/project manager software routine, capable of being graphically represented and displayed on a computer-screen as a project manager icon, for managing a plurality of projects; and a resource management system contained within the project management system and capable of being graphically represented and displayed on the computer-screen as a resource manager icon, for managing a resource data; a database shared by the program/project manager and the resource management system, stored in a memory of the computer for storing the resource data; and linking means for linking a booking of the resource data contained in the database with the project management system; wherein the booking can be managed both within the context of a project as well as in the system independent of a project.

Another aspect of the present invention provides a method of linking a project management system with a resource management system, each suitable for computer or internet-based

use, wherein the system comprises a project management system including: a program/project manager software routine, containing a plurality of projects, capable of graphical representation and display on a computer-screen as a program/project manager icon, clicking on which the corresponding software routine may be activated, wherein each project contained in the program/project manager is represented by a Gantt chart on the computer-screen representing a plurality of events of a project that is selected or created, the Gantt chart indicating a start date and an end date of the project and the events; a resource management system contained within the project management system, capable of graphical representation and display on the computer-screen as a resource manager icon, for managing a resource data and consisting of software routines capable of graphical representation and display on a computer- screen as icons, clicking on which the corresponding software routine is activated; and a database shared by the program/project manager and the resource management system, stored in a memory of the computer for storing the resource data and booking tables; said method comprising the steps of:

activating the project management system by inputting appropriate user name and password; initializing of the system by configuring the system, defining lists and populating repositories, stored in the database; invoking the resource management system and thereby generating the computer- screen displaying icons for representing human resources, facility resources and project expense book; and selecting the event on the Gantt chart of the selected project in the project management system and altering the corresponding booking of the resources.

The areas in which the enhanced iC21 system of the invention excels over the prior techniques reside in the amount of detail that can be attached to a resource assignment, and the types of resources that can be attached to an event. The prior systems only permit people to be attached to an event, with an associated percentage workload. Since the enhanced iC21 attaches a booking to an event, all the details of a booking are present. The enhanced iC21 also allows facility bookings and expenses to be attached to an event, something that is lacking in the prior art.

Brief Description of the Drawings

The present invention will now be further described, by way of example, with reference to

the accompanying drawings, in which:

Figure 1 illustrates a flow diagram showing the relationship between the project/event manager and the resource manager;

Figure 2 illustrates a high level diagram showing all the links between the Project Repository and the various blocks of a Resource Management System of the present invention;

Figure 3 is a flow chart describing the flow of operations when a resource booking within the resource management system is assigned to an event of the project management system; and

Figure 4A to Figure 4J illustrate a series of display screen images relating to the flow of operation.

Detailed Description of the Invention

The project management system iC21 which is utilized in the present invention is a complete solution based on best business practices that includes roll-up events, predecessors, rudimentary critical path display and a rescheduling system that cascades changes to related items (rudimentary schedule optimization). The system is designed to integrate business processes and manage critical, high-value operations. It is ideal for service and knowledge-based businesses. Built on a modular, enterprise-scalable, distributed architecture, it is designed to satisfy any unique business needs that one may have.

The following terms will be defined below for the understanding of the user of the system.

Project User	A person who is scheduled on projects and needs to update those projects;
Resource User	A person who is given assignments and needs to report on what they have done;
Resource Manager	A person who manages resources. This designation gives access to all the functionality within the "Resource Manager" folder;
Project Manager	A person who manages projects. This designation gives access to all the functionality within the "Project Manager" folder;

Facility Manager	A person who maintains facility records. This designation gives access to the "Resource Manager" folder and the Facility Repository;
System Administrator	Someone who maintains the repositories and configures other portions of iC21. This designation gives access to all the functionality within the "Admin Manager" folder.

The Project Management System iC21 comprises the following basic modules:

1. an Administration Manager module called Admin Manager, providing a centralized place for all system settings. It allows the user to configure iC21 according to individual requirements, thus delivering a personalized solution. It also contains repositories for staff, facilities and expenses and a user-based application and data security;

2. a basic module called Program/Project Manager that allows for integration, prioritization, communication and continuous control of many projects across an enterprise. In addition, it provides the ability to accomplish enterprise wide strategic planning. Enterprise wide projects may be stored in the form of an Oracle ™ database which in turn may be grouped under Program Manager. The ability to manage many projects by many people at various organizational levels is key for knowledge-intensive service organizations. The goal of the Project management system is to provide integrated product and service teams with executable plans and accurate performance data and give the manager sufficient lead time for solving potential problems and make better business decisions; and

3. a resource management module called the resource manager that assists the user to deploy the right staff, facilities and expenses to the right projects at the right time. It simplifies staffing, scheduling, managing skills and developing organizational capabilities.

iC21 project management system works on a client server system where all the users may be connected via Netscape or any other web browser.

The recommended Client System is: 400 MHz or faster Pentium II-based PC, Microsoft Windows 95/98/NT4.0 or any system that supports Sun Java1.2.2, 10 MB of hard disk space and 128 MB of RAM.

The recommended Server System is: 600 MHz or faster Pentium II-based PC, Microsoft

Windows NT4.0, 2 GB of hard disk space and two physical hard drives, 256 MB of RAM or better, depending on the number of users.

The URL address where the iC21 can be found may be provided by the system administrator. The initial set-up is also undertaken by the System Administrator.

The initial process involves configuring the iC21 project management system, defining lists and populating the repositories, which is the foundation of iC21. Once this has been done, the system is ready to be used and this configuring operation will not need to be executed again although updating the repositories is an ongoing process.

In order to activate a particular software module which is graphically displayed on a computer screen, generally the mouse pointer is placed on a particular display, such as an icon or an area of a graph, and then the left button of the mouse is depressed and released. This activity will be referred to herein as "clicking on", since this the most commonly used term in the art.

Defining the Lists

The lists are essential in providing the designations that are available for all resources within iC21. They must be defined before one can begin to populate the repositories. In general, the following items are available for editing:

Band, Business Development Managers, Department, Employee Status, Employee Type, Facility Capability, Facility Capability Level, Functional Org, Line of Business, Location, Path, Portal Box Colors, Position, Priority, Probability, Program Type, Staff Expertise, Staff Expertise Level, System Constants and Team Leader.

Populating the Repositories:

In the Staff Repository, the Project manager will define the users of the system and enter data relating to staff who will be managed through iC21 Project Management System

To begin populating the Staff Repository, the following steps should be followed:

1. In the **Admin Manager** sub-menu, once the **Staff Repository** icon is clicked on, in the right frame, the Staff Repository screen opens.

2. Next, the **New** button is clicked on.

The **Employee Information** screen appears in a new window. All the fields that are relevant are filled in and a user name and password are assigned to that staff member.

3. The **Insert** button is clicked on.

This takes one to the **Staff Record** that has just been created and allows the user to add further information.

A similar process is repeated to continue to create **Employee Records**. The following terms are defined in connection with the Employee records.

Capacity Year	indicates the number of working days per month in a particular year for a given employee.
Expertise	indicates the employee's fields of expertise and level of proficiency in each as well as concentration expressed as a percentage of the employee's time.
LLC	(Loaded Labour Cost) indicates the per day cost of the employee at a specific time period, this allows for an unlimited number of periods.
Role	assigns the employee a role within the iC21 and a level of access.

To add further information about employees, these steps are followed:

1. In the **Staff Repository** screen, any employee record link is clicked on. The **Employee Information** screen appears in a new window.

On scrolling down to the bottom one will see these additional elements:

2. In the **Employee Information** screen, click on the **Add New Capacity Year** button. The **Staff Capacity** screen appears in a new window.

3. After entering the data the **Insert** button is clicked on. A screen appears with the message "Record Created Successfully".

To begin populating the **Facility** and **Expense Repositories**, similar steps for each respective repository are followed.

The **Facility Repository** houses information about labs, test equipment, meeting rooms and other resources that can be booked.

The **Expense Repository** houses information about the standard types of expenses that

the accounting department uses.

Repositories may be updated by creating new staff, facilities or expenses or modifying existing resources. To find specific records, the **Search** utility may be used.

The present invention enhances an existing project management system (iC21) by integrating a resource management system contained therein, so that the resource assignment booking such as, facility bookings, staff assignments and expenses within the resource management system can be linked to events in the project management system thereby enhancing the project management system by adding functionality.

The advantages that the enhanced iC21 achieves are namely, its ability to manage many projects, providing reports that span projects in the system and in its resource management system. In this respect, especially, it is far more powerful than the existing prior art systems. For example, where the prior systems have the ability to indicate which people are working on an event, the enhanced iC21 goes much further by providing a complete booking system for people, facilities and expenses, in which bookings, assignments etc. for all projects, are stored. Each of these bookings can be attached to an event and can be managed within a project. These include dates (possibly different from those of the event), workload, percentage completed, notes, status (plan/forecast/actual) etc. As a result, all resources can be managed both within the context of a project as well as in a booking system independent of projects. This allows them to be shared by various projects and managed by both project and resource managers.

Referring now to Figure 1, an embodiment of the invention is described in which the links between the project management system and the resource management system are illustrated. Within the project manager there resides a project plan/event repository. The resource booking repository and the project repository are shared between the project manager and the resource manager.

Bookings in the booking repository may be related to a project in the project repository. These bookings may also be related to events in the project plan/events repository. Each event in the project plan/event repository is attached to a project in the project repository.

Events related to bookings may be shared between resource bookings repository and the project plan/event repository. Events related to projects may be shared between project repository and project plan/event repository.

Figure 2 shows the links between the various repositories in the database with all the fields and how each project is linked with resources comprising human resources, expenses and facilities is shown. For example: details for each project are obtained from the database under "Project_Registers" wherein various fields like ID, Project Name, Project start date, Project end date etc., are stored. This is linked with Staff Booking, Facility Booking and Expense Book. Once the user has finished populating the repositories, the system will be ready for use.

Figure 3 shows the flow of operation illustrated using a basic block diagram. The user activates the system by typing in the user name and password (step 20). Next the lists will be defined and the repositories will be populated (step 40) by the user as explained above. The enhanced project management system of the invention produces a Gantt-like chart for each project which consists of all the events of a project (step 60). Each project is represented by a Gantt chart, which is a graphical representation of a project schedule that shows each task as a bar having a length proportional to the duration of the task. Each event is linked with the resources stored in a database (step 80). By clicking on any event on the Gantt chart booking of a resource assignment that is linked with the event can be viewed and can be changed (step 100).

Once the system is activated from the access URL, and user name and password have been entered, the first screen appears which is the Main Menu as shown in Figure 4A, wherein, the "Project Manager" and the "Resource Manager" folders are shown as icons on the screen. By clicking upon the "Project Manager" folder, four icons will be revealed (Figure 4B), namely, "My People", "My Customers", "My Projects" and "Import New Project".

To start a new project, in the "Project Manager" folder, "My Projects" icon may be clicked upon. The "Project Registers List" screen opens in the right hand frame. When the "New"

button is clicked, the "New Project Register" screen appears in a new window. The fields should be filled in accordingly, and then upon clicking on the "Create" button a new project is created (not shown in the figure). Each project is represented by a Gantt chart, graphically describing a project schedule that shows each task as a bar having a length proportional to the duration of the task.

The Resource Management System is indicated by the icon "Resource Manager" folder. By clicking on this folder, three icons are revealed, namely: "My people", "My Facilities" and "My Expenses", as shown in Figure 4C.

The flow of operations in the Resource Management System will now be described with the help of Figures shown in 4C to 4J. In the "Resource Manager" folder, clicking upon "My People" icon will invoke the next window "Staff" in the right hand frame, shown in Figure 4C, where detailed information (e.g., Last name, First name, Department, Path, Band, Type, Status, Location and Phone Number) of each staff member may be viewed. On the top portion of this screen four icons appear; namely, "Search", "People Balance", "Project Balance" and "Loading".

Search screens are similar throughout the system. One can search on various fields, using the following constraints:

%	Don't search on this field
=	Field equals what's given
>	Field is greater than what's given
>=	Field is greater than or equal to what's given
<	Field is less than what's given
<=	Field is less than or equal to what's given
like	Field is similar to what's given
!=	Field is not equal to what's given
null	Field is null

Most screens have icons on the top portion of a screen, a list of which is supplied here below.

Buttons

Print

Save

Add event

Access knowledge library

Change % complete

Drag & drop entries

Change start and end dates for entries

Create entry links

Show or hide annotations

Enable or disable grid

Expand all folders

Collapse all folders

Add capability

Add expertise

By clicking on the "People Balance" icon, the "Staff Assignments" screen appears in a new window, shown in Figure 4E. In this Gantt chart, an Assignment detail of any project may be viewed against the names of the individual staff members. Three different colors indicate Plan, Forecast and Actual bookings. Some parts of the chart may be indicated by hashed lines, which means these bookings are related to an event in the project management system. By clicking upon any area of the chart, information such as the name of the project, status, start and end date, percentage completed, workload in percentage, etc. maybe viewed in a smaller screen.

In the "Staff Assignments", by clicking on the "Staff Capacity" tab, the next window shown in Figure 4D appears, where one can see which people are working on which assignments as well as the status of their work. For each individual staff member a capacity chart is produced which shows the usage of a person over time, and upon clicking any area of the chart, information such as which project the individual is working on and workload in percentage and the Event associated with the project and the workload in percentage is displayed in a small screen along with the total workload.

By clicking on "Loading" button, the capacity of the staff against Plan, Forecast and Actual Usage may be seen with respect to months and days as shown in Figure 4F. By clicking on a data point on the graph, the underlying data can be viewed.

The next screen is shown by Figure 4G, where each event of a selected project plan can be viewed by a bar against start date and end date. By selecting the annotation and then by placing the mouse pointer on any area of a bar, information such as the name of the project, start date and time, end date and time, duration, baseline start, baseline end, resources, percentage completed may be viewed in a smaller screen. Furthermore, these values can be altered or edited by selecting the event and by selecting the area and by dragging the mouse pointer as desired.

The next screen is shown by Figure 4H, where by right-clicking on the appropriate event and selecting "Resources", resource booking may be viewed and altered.

The cost for booking staff, facilities and expenses are automatically calculated based upon the selection. As the selection is changed or altered in any way, the cost for the project is also changed. This can be viewed in bar graph form or a chart form as shown in Figure 4I and Figure 4J.

In the project manager, the system software loads all the events into the Gantt chart from the database table contained in the database; searches for the booking tables in the database to find all the bookings that are related to the events in the Gantt chart, and then

loads them into the memory using the Gantt software routine. When the user wishes to create a new booking related to an event, the software creates this booking in memory, with appropriate information to represent the relationship, and saves this new information back to the booking tables in the database.

Every event in the Gantt chart is represented as an event object in the database. The resource management system consists of a plurality of staff assignments, facility bookings, and expenses that can be represented and displayed on the computer screen as a Gantt-like chart with bars thereon; wherein the bars on the Gantt chart represent a plurality of assignments, facility bookings and expenses. Each assignment, booking and expense is represented as a booking object in the database. The booking objects in the database, have an event attribute representing the event object the booking object is related to. The event attributes contained in the booking objects are used by the program/project manager software routine to determine which booking objects are related to the events in the corresponding Gantt chart. The event attributes contained in the booking objects are used by the resource management software routine to determine which event objects are related to the bookings in the corresponding Gantt-like chart.

Thus, the present invention provides a system and method of integrating a resource management system with an existing project management system, so that the resource assignment booking such as, facility bookings, staff assignments and expenses within the resource management system can be linked to events in the project management system thereby enhancing the project management system by adding functionality. As a result, a resource manager has the ability to manage all bookings and assignments at the database level, including those that are related to events.

What is claimed is:

1. A computer- or internet-based system for linking a project management system with a resource management system contained therein, wherein the system comprises:

a project management system including:

a program/project manager software routine, capable of being graphically represented and displayed on a computer-screen as a project manager icon, for managing a plurality of projects; and

a resource management system contained within the project management system and capable of being graphically represented and displayed on the computer-screen as a resource manager icon, for managing a resource data;

a database shared by the program/project manager and the resource management system for storing the resource data; and

linking means for linking a booking of the resource data contained in the database with the events of a project contained in the project management system at the database level;

wherein the booking can be managed both within the context of a project as well as in the system independent of a project.

2. A system as claimed in claim 1, wherein the program/project manager software routine contained in the project management system consists a plurality of projects that can be graphically represented and displayed on the computer- screen as a Gantt chart with bars thereon;

wherein the bars on the Gantt chart represent a plurality of events contained in a project in said plurality of projects.

3. A system as claimed in claim 2, wherein every event in the Gantt chart is represented as an event object in the database.

4. A system as claimed in claim 1, wherein a resource management software routine

contained in the resource management system consists of a plurality of assignments, facility bookings, and expenses that can be represented and displayed on the computer screen as a Gantt-like chart with bars thereon;

wherein the bars on the Gantt chart represent a plurality of assignments, facility bookings and expenses.

5. A system as claimed in claim 4, wherein each assignment, facility booking and expense is represented as a booking object in the database.

6. A system as claimed in claim 5, wherein the booking objects in the database have an event attribute representing the event object to which the booking object is related.

7. A system as claimed in claim 6, wherein the event attributes contained in the booking objects are used by the program/project manager software routine to determine which booking objects are related to the events in the corresponding Gantt chart.

8. A system as claimed in claim 6, wherein the event attributes contained in the booking objects are used by the resource management software routine to determine which event objects are related to the bookings in the corresponding Gantt-like chart.

9. A system as claimed in claim 1, wherein the program/project manager software routine comprises:

project selection means for selecting a project from the plurality of projects contained in the program/project manager;

activation means for activating the program/project manager software routine to create the Gantt chart representing the plurality of events of a selected project, indicating a start date and an end date of the projects and the events; and

event selection means for selecting and activating an event of the selected project by clicking upon an area represented by the event ;

wherein the plurality of events of the selected project is graphically shown on the Gantt chart that represents the selected project.

10. A system as claimed in claim 1, wherein the database containing the resource data information maybe stored in computer memory.

11. A method of linking a project management system with a resource management system, each suitable for computer- or internet-based use, wherein the system comprises:

a project management system including:

a program/project manager software routine, containing a plurality of projects, capable of graphical representation and display on a computer-screen as a program/project manager icon, clicking on which the corresponding software routine may be activated,

wherein each project contained in the program/project manager is represented by a Gantt chart on the computer-screen representing a plurality of events of a project that is selected or created, the Gantt chart indicating a start date and an end date of the project and the events;

a resource management system contained within the project management system, capable of graphical representation and display on the computer-screen as a resource manager icon, for managing a resource data and consisting of software routines capable of graphical representation and display on a computer- screen as icons, clicking on which the corresponding software routine is activated; and

a database shared by the program/project manager and the resource management system, stored in a memory of the computer for storing the resource data and booking tables;

said method comprising the steps of:

activating the project management system by inputting appropriate user name and password;

initializing of the system by configuring the system, defining lists and populating repositories, stored in the database;

invoking the resource management system and thereby generating the computer-screen displaying icons for representing human resources, facility resources and project expense book; and

selecting the event on the Gantt chart of the selected project in the project management system and altering the values in the corresponding booking of the resources.

12. A method of linking, as claimed in claim 11, wherein said populating the repositories includes the steps of:

populating a resource repository containing a staff repository, a facility repository and an expense repository by inputting resource data in the database stored in the memory of the computer;

wherein the staff repository contains information about employee record and capacity; the facility repository contains information about labs, test equipment, meeting rooms and other resources that may be booked; and the expense repository contains information about standard expenses used by an accounting department; and

populating a project repository by inputting project information data in the database stored in the memory of the computer.

13. A method of linking, as claimed in claim 11, further comprises the steps of:

searching for the resource data in the database to find all the resource data that are related to the events in the Gantt chart and loading booking tables into the memory using a Gantt software routine by clicking on an area on the Gantt chart indicating the event;

reviewing booking tables generated thereby showing existing bookings from the database;

creating a new booking related to an event in the memory, containing information for representing a relationship;

altering the corresponding booking of the resources; and

saving the new information back into the booking tables in the database.

14. A method of linking, as claimed in claim 11, wherein said invoking the resource management system comprising the steps of:

linking human resources information contained within the database with the selected event in the project by clicking on the icon representing the human resources information;

linking facility resources information contained within the database, with the selected event in the project by clicking on the icon representing the facility resources; and

linking project expense book information contained within the database, with the selected event in the project by clicking on the icon representing the project expense book;

wherein the booking of the resources with respect to an event can be viewed or altered.

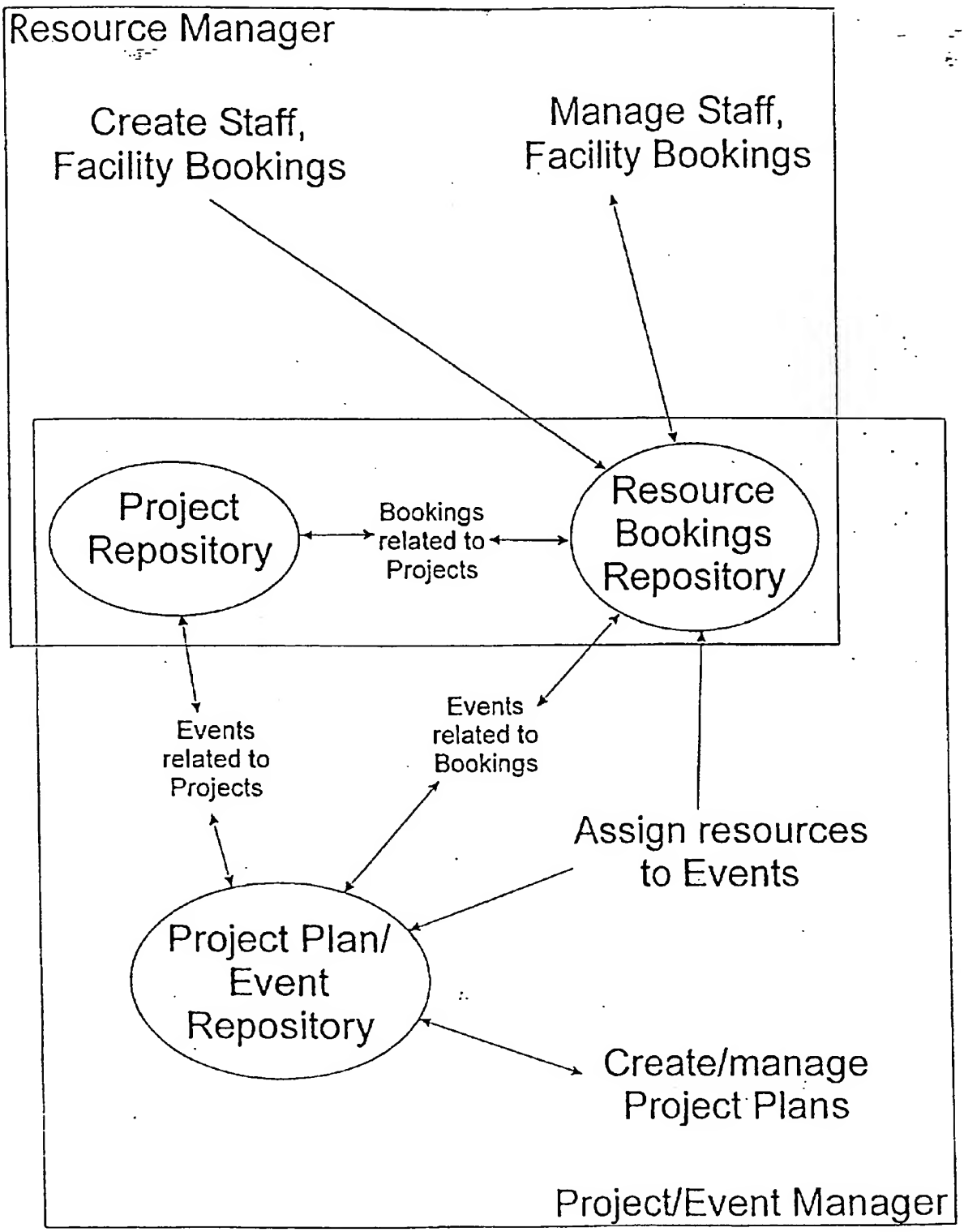
Resource Manager
Create Staff, Facility Bookings
Manage Staff, Facility Bookings
Project Repository
Bookings related to Projects
Resource Bookings Repository
Events related to Projects
Events related to Bookings
Assign resources to Events
Project Plan/ Event Repository
Create/manage Project Plans
Project/Event Manager

FIGURE 1

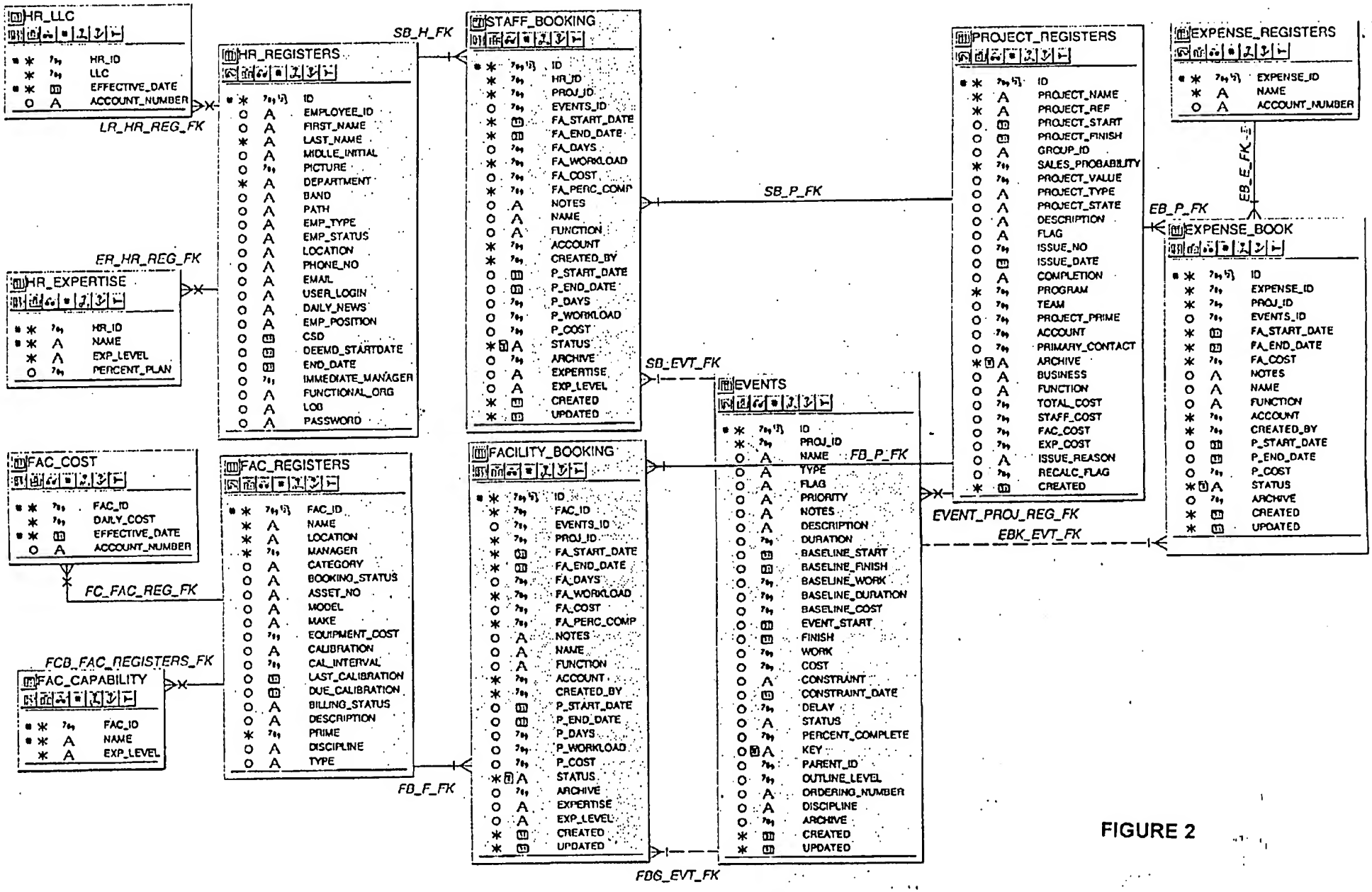
HR_LLC
HR_ID
LLC
EFFECTIVE_DATE
ACCOUNT_NUMBER
LR_HR_REG_FK
HR_REGISTERS
ID
EMPLOYEE_ID
FIRST_NAME
LAST_NAME
MIDLLE_INITIAL
PICTURE
DEPARTMENT
BAND
PATH
EMP_TYPE
EMP_STATUS
LOCATION
PHONE_NO
EMAIL
USER_LOGIN
DAILY_NEWS
EMP_POSITION
CSD
DEEMD_STARTDATE
END_DATE
IMMEDIATE_MANAGER
FUNCTIONAL_ORG
LOG
PASSWORD
SB_H_FK
STAFF_BOOKING
ID
HR_ID
PROJ_ID
EVENTS_ID
FA_START_DATE
FA_END_DATE
FA_DAYS
FA_WORKLOAD
FA_COST
FA_PERC_COMP
NOTES
NAME
FUNCTION
ACCOUNT
CREATED_BY
P_START_DATE
P_END_DATE
P_DAYS
P_WORKLOAD
P_COST
STATUS
ARCHIVE
EXPERTISE
EXP_LEVEL
CREATED
UPDATED
SB_P_FK
PROJECT_REGISTERS
ID
PROJECT_NAME
PROJECT_REF
PROJECT_START
PROJECT_FINISH
GROUP_ID
SALES_PROBABILITY
PROJECT_VALUE
PROJECT_TYPE
PROJECT_STATE
DESCRIPTION
FLAG
ISSUE_NO
ISSUE_DATE
COMPLETION
PROGRAM
TEAM
PROJECT_PRIME
ACCOUNT
PRIMARY_CONTACT
ARCHIVE
BUSINESS
FUNCTION
TOTAL_COST
STAFF_COST
FAC_COST
EXP_COST
ISSUE_REASON
RECALC_FLAG
CREATED
EXPENSE_REGISTERS
EXPENSE_ID
NAME
ACCOUNT_NUMBER
EB_E_FK
EB_P_FK
EXPENSE_BOOK
ID
EXPENSE_ID
PROJ_ID
EVENTS_ID
FA_START_DATE
FA_END_DATE
FA_COST
NOTES
NAME
FUNCTION
ACCOUNT
CREATED_BY
P_START_DATE
P_END_DATE
P_COST
STATUS
ARCHIVE
CREATED
UPDATED
ER_HR_REG_FK
HR_EXPERTISE
HR_ID
NAME
EXP_LEVEL
PERCENT_PLAN
SB_EVT_FK
EVENTS
ID
PROJ_ID
NAME
TYPE
FLAG
PRIORITY
NOTES
DESCRIPTION
DURATION
BASELINE_START
BASELINE_FINISH
BASELINE_WORK
BASELINE_DURATION
BASELINE_COST
EVENT_START
FINISH
WORK
COST
CONSTRAINT
CONSTRAINT_DATE
DELAY
STATUS
PERCENT_COMPLETE
KEY
PARENT_ID
OUTLINE_LEVEL
ORDERING_NUMBER
DISCIPLINE
ARCHIVE
CREATED
UPDATED
FB_P_FK
EVENT_PROJ_REG_FK
EBK_EVT_FK
FAC_COST
FAC_ID
DAILY_COST
EFFECTIVE_DATE
ACCOUNT_NUMBER
FC_FAC_REG_FK
FAC_REGISTERS
FAC_ID
NAME
LOCATION
MANAGER
CATEGORY
BOOKING_STATUS
ASSET_NO
MODEL
MAKE
EQUIPMENT_COST
CALIBRATION
CAL_INTERVAL
LAST_CALIBRATION
DUE_CALIBRATION
BILLING_STATUS
DESCRIPTION
PRIME
DISCIPLINE
TYPE
FCB_FAC_REGISTERS_FK
FAC_CAPABILITY
FAC_ID
NAME
EXP_LEVEL
FB_F_FK
FACILITY_BOOKING
ID
FAC_ID
EVENTS_ID
PROJ_ID
FA_START_DATE
FA_END_DATE
FA_DAYS
FA_WORKLOAD
FA_COST
FA_PERC_COMP
NOTES
NAME
FUNCTION
ACCOUNT
CREATED_BY
P_START_DATE
P_END_DATE
P_DAYS
P_WORKLOAD
P_COST
STATUS
ARCHIVE
EXPERTISE
EXP_LEVEL
CREATED
UPDATED
FBS_EVT_FK

FIGURE 2

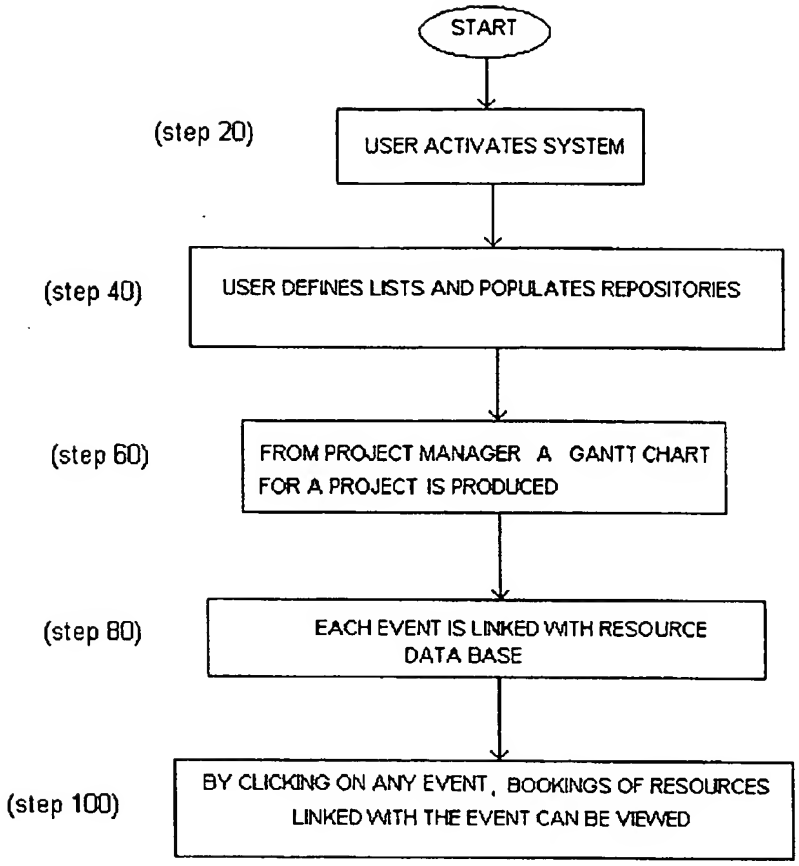
START
(step 20)
USER ACTIVATES SYSTEM
(step 40)
USER DEFINES LISTS AND POPULATES REPOSITORIES
(step 60)
FROM PROJECT MANAGER A GANTT CHART FOR A PROJECT IS PRODUCED
[Figure 4G]
(step 80)
EACH EVENT IS LINKED WITH RESOURCE DATA BASE
(step 100)
BY CLICKING ON ANY EVENT, BOOKINGS OF RESOURCES LINKED WITH THE EVENT CAN BE VIEWED
[Figure 4H]

FIGURE 3

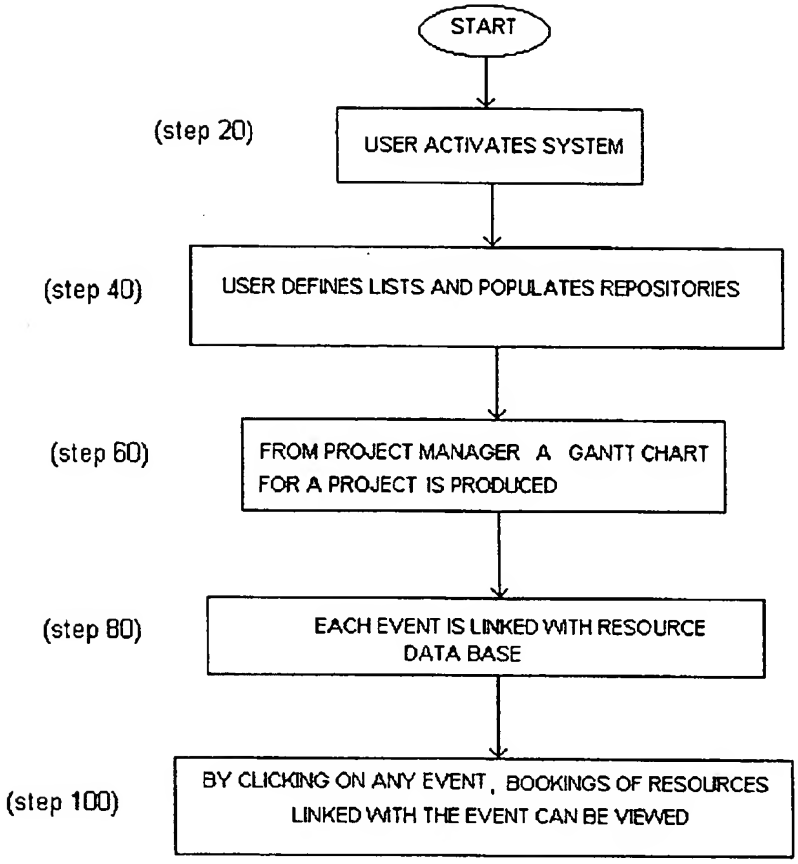
START
(step 20)
USER ACTIVATES SYSTEM
(step 40)
USER DEFINES LISTS AND POPULATES REPOSITORIES
(step 60)
FROM PROJECT MANAGER A GANTT CHART FOR A PROJECT IS PRODUCED
[Figure 4G]
(step 80)
EACH EVENT IS LINKED WITH RESOURCE DATA BASE
(step 100)
BY CLICKING ON ANY EVENT, BOOKINGS OF RESOURCES LINKED WITH THE EVENT CAN BE VIEWED
[Figure 4H]

FIGURE 3

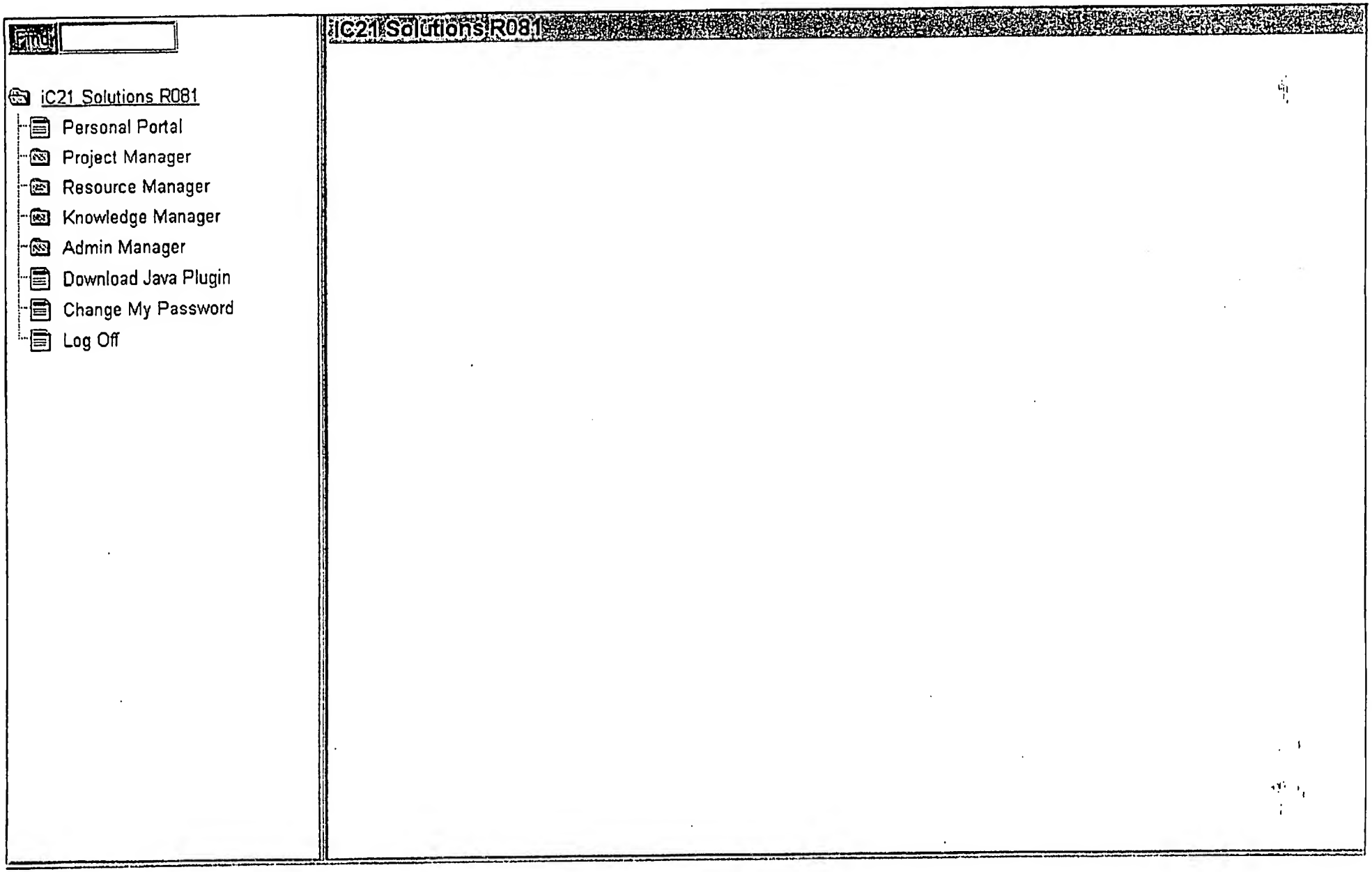
Find
iC21 Solutions R081
iC21 Solutions R081
Personal Portal
Project Manager
Resource Manager
Knowledge Manager
Admin Manager
Download Java Plugin
Change My Password
Log Off

FIGURE 4A

UNSCANNABLE ITEM

RECEIVED WITH THIS APPLICATION

(ITEM ON THE 10TH FLOOR ZONE 5 IN THE FILE PREPARATION SECTION)

DOCUMENT REÇU AVEC CETTE DEMANDE

NE POUVANT ÊTRE BALAYÉ

(DOCUMENT AU 10 IÈME ÉTAGE AIRE 5 DANS LA SECTION DE LA

PRÉPARATION DES DOSSIERS)